



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,289	09/12/2001	Taizo Sato	SATO=22	3961

7590 12/31/2003
Browdy & Neimark
624 Ninth Street Suite 300
Washington, DC 20001

EXAMINER

ROY, SIKHA

ART UNIT PAPER NUMBER

2879

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,289

Applicant(s)

SATO ET AL.

Examiner

Sikha Roy

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 3 and 4 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The Amendment, filed on October 7, 2003 has been entered and is acknowledged by the Examiner.

Cancellation of claims 1,5,8 and addition of new claims 10-12 have been entered.

Election/Restrictions

Claims 3 and 4, directed to method of manufacturing shadow mask material were withdrawn from consideration without prejudice and without traverse pursuant to 37 CFR 1.142(b) as being directed to a non-elected group in reply to Restriction Requirement filed March 20, 2003.

Applicant has already received an action on the merits for the claims for elected invention and accordingly claims 3 and 4 having been withdrawn from consideration are not examined.

Claim Objections

Claim 2 is objected to because of the following informalities:

In claim 2, 'rolling finish' should be replaced by --rolling furnish--.

In claim 2 the unit of boron (B) is not defined.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2879

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2,7,9 and 10 -12 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2-254139 to Toyo Kohan Co. LTD.

Referring to claim 2, JP 2-254139 discloses (please see Constitution) shadow mask material comprising 0.0013 wt.% of nitrogen (Table: embodiment 1), 0.0005-0.01 wt.% of carbon, silicon equal or less than 0.03 wt.%, 0.05-0.60 wt.% of manganese, 0.013 wt.% of phosphorus, 0.014 wt.% of sulfur, 0.02-0.50 wt.% of aluminum, 0.001-0.030 wt.% of boron and the residue including iron with unavoidable impurities and in which the value of $B/N \times 14/11$ is regulated to satisfy a predetermined value of 1.5, B and N representing the wt.% of boron and nitrogen present in the mask material. JP 2-254139 further discloses that this shadow mask material provides excellent non-ageing and press formability characteristics.

The Examiner notes that the claim limitation that "wherein a hot rolling furnace is higher than point Ar_3 , the steel is hot rolled at a coiling temperature of from 540 to 680 °C and cold rolled after pickling, the steel sheet is then annealed at a predetermined temperature and soaked for 60 to 120 seconds" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113). Therefore, it is the position of the examiner that it

would have been obvious to one of ordinary skill in the art that the shadow mask material disclosed by JP 2-254139 is at least a fully functional equivalent to the Applicant's claimed shadow mask material.

Referring to claim 7 JP 2-254139 discloses this low carbon aluminum-killed steel material made with this specific composition is used for material for shadow mask.

Referring to claim 9 JP 2-254139 discloses the shadow mask is used in image forming picture tubes.

Claim 10 essentially recites the same limitation as of claim 2 and hence is rejected for the same reason.

Claims 11 and 12 recite the limitations same as of claims 7 and 9 respectively and hence are rejected for the same reasons.

Response to Arguments

Applicant's arguments filed October 7, 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that prior art of JP 2-254139 discloses shadow mask material containing chromium and the present invention does not contain chromium, the examiner notes that the transitional term 'comprising' is open-ended and does not exclude additional, unrecited elements. See, e.g., *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) ("Comprising" is a term of art used in claim language which means that the named elements are essential,

but other elements may be added and still form a construct within the scope of the claim.) MPEP 2111.03.

In the new claim 10, 'consisting essentially of' is construed as equivalent to 'comprising'. The examiner respectfully submits that disclosure in specification uses the term 'comprises'. The prior art composition of shadow mask material having chromium yields good press forming characteristics and does not affect the basic characteristic of the claimed invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2879

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (703) 308-2826. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

S.R.

Sikha Roy
Patent Examiner
Art Unit 2879

N.D. Patel
NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800